



**[6450-01-P]**

**DEPARTMENT OF ENERGY**

**Amended Record of Decision for the Site-Wide Environmental Impact Statement for the Continued Operation of Los Alamos National Laboratory, Los Alamos, NM**

**AGENCY:** National Nuclear Security Administration, Department of Energy.

**ACTION:** Amended record of decision.

**SUMMARY:** The National Nuclear Security Administration (NNSA), a semi-autonomous agency within the U.S. Department of Energy (DOE), is announcing this amendment to the September 26, 2008 Record of Decision (ROD) for the Site-Wide Environmental Impact Statement (SWEIS) for the Continued Operation of Los Alamos National Laboratory (LANL), Los Alamos, NM (2008 LANL SWEIS ROD). In this Amended ROD, NNSA announces its decision to implement elements of the 2008 LANL SWEIS Expanded Operations Alternative needed to produce a minimum of 30 war reserve pits per year during 2026 for the national pit production mission and to implement surge efforts to exceed 30 pits per year to meet Nuclear Posture Review (NPR) and national policy. NNSA has previously evaluated this action at the programmatic level in the Complex Transformation SPEIS and at the site-specific level in the LANL Sitewide Environmental Impact Statement (SWEIS), and recently completed a review of those prior analyses in a separate Supplement Analysis (SA) for each document.

**FOR FURTHER INFORMATION CONTACT:** For further information on this Amended ROD or the 2020 LANL SA, contact: Kristen Dors, NEPA Compliance Manager, U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Field Office, 3747 W. Jemez Road, Los Alamos, NM 87544; phone: (505) 667-5491; or via e-mail at

*lanlsweissa@nnsa.doe.gov*. This Amended ROD, the 2020 LANL SA, and related NEPA documents are available at <https://www.energy.gov/nnsa/nnsa-nepa-reading-room>.

## **SUPPLEMENTARY INFORMATION:**

### **Background**

Pit production, at a level of 80 pits per year at LANL, has been analyzed in two programmatic environmental impact statements (EISs) and two LANL site-wide EISs, including the 1999 *Site-Wide Environmental Impact Statement for the Continued Operation of the Los Alamos National Laboratory* (1999 LANL SWEIS) (DOE/EIS-0238), and the 2008 *Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory* (2008 LANL SWEIS) (DOE/EIS-0380). As national policy and national defense needs have evolved, NNSA prepared a supplement analysis (SA) to the 2008 LANL SWEIS (2020 LANL SA) (DOE/EIS-380-SA-06). The 2020 LANL SA re-evaluates the potential environmental impacts of producing a minimum of 30 pits per year at LANL and of implementing surge efforts to exceed 30 pits per year to determine if there have been substantial changes to NNSA's proposed implementation of increased pit production or significant new circumstances or information relevant to environmental concerns, within the meaning of the National Environmental Policy Act (NEPA). After preparing and considering the 2020 LANL SA, NNSA has determined that no further NEPA analysis is needed prior to issuing this Amended ROD.

NNSA has a statutory mission to maintain and enhance the safety, reliability, and performance of the U.S. nuclear weapons stockpile including the ability to design, produce, and test, in order to meet national security requirements. The purpose and need for the continued operation of LANL is to provide support for NNSA's core missions as directed by Congress and the President (2008 LANL SWEIS). Congress and the President have directed that during 2026 LANL will produce

a minimum of 30 war reserve pits per year for the national pit production mission and implement surge efforts to exceed 30 pits per year to meet NPR and national policy (50 USC 2538a; Public Law 115-232, Section 3120). To meet this direction, NNSA must now implement previously analyzed elements of the Expanded Operations Alternative from the 2008 LANL SWEIS.

The environmental impacts of pit production at LANL have been analyzed at a both programmatic and site-specific level several times. The first programmatic EIS in the post-Cold War era was the 1996 *Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (SSM PEIS) (DOE/EIS-0236). The SSM PEIS evaluates pit production of 80 pits per year at LANL. In December 1996, NNSA issued a ROD announcing a decision setting pit production at LANL at 20 pits per year (61 FR 68014; December 26, 1996). Tiering from the SSM PEIS, the site-specific 1999 LANL SWEIS also evaluates pit production levels of 80 pits per year at LANL. In the 1999 LANL ROD, NNSA confirmed its decision for pit production at LANL at 20 pits per year (64 FR 50797; Sept 20, 1999).

In 2008, NNSA prepared the *Complex Transformation Supplemental Programmatic Environmental Impact Statement—Operations Involving Plutonium, Uranium, and the Assembly and Disassembly of Nuclear Weapons* (Complex Transformation SPEIS) (DOE/EIS-0236-S4). The Complex Transformation SPEIS evaluates, among other things, alternatives for producing 10-200 pits per year at different site alternatives, including LANL. In the 2008 Programmatic ROD, NNSA did not make any new decisions related to pit production capacity beyond 20 pits per year at LANL (73 FR 77644 December 19, 2008). Tiering from the Complex Transformation SPEIS, the 2008 LANL SWEIS analyzed three alternatives: a Reduced Operations Alternative, a No Action Alternative (20 pits per year), and an Expanded Operations Alternative (80 pits per year). Under the Expanded Operations Alternative, NNSA analyzed

existing space at LANL in the Plutonium Facility and other infrastructure to support production of up to 80 pits per year. In the 2008 LANL SWEIS ROD and subsequent RODs, NNSA selected a No Action Alternative (continuation of existing operations) with some elements of an Expanded Operations Alternative, which maintained NNSA's decision for pit production levels of 20 pits per year at LANL (73 FR 55833 September 26, 2008; 74 FR 33232 July 10, 2009; and 76 FR 40352 July 8, 2011).

Both federal law and national security policy now require pit production rates of a minimum of 30 pits per year at LANL during 2026, and not less than 80 pits per year nationally during 2030 (50 USC 2538a; Pub. L. 115-232). Because operations involving SNM are complex, implementing changes in operations such as pit production take several years. To these ends, NNSA is issuing an Amended ROD to the Complex Transformation SPEIS announcing its programmatic decision to implement elements of a Modified Distributed Centers of Excellence (DCE) Alternative whereby LANL will produce a minimum of 30 war reserve pits per year for the national pit production mission during 2026 and implement surge efforts to exceed 30 pits per year as needed. Prior to issuing that Amended ROD, NNSA prepared an SA of the Complex Transformation SPEIS to determine if the existing Complex Transformation SPEIS should be supplemented, a new EIS should be prepared, or that no further NEPA analysis would be required. Based on the analysis presented in the 2019 SPEIS SA, NNSA determined that no further NEPA analysis was needed at a programmatic level.

NNSA is now issuing an Amended ROD to the 2008 LANL SWEIS. Prior to issuing this Amended ROD, NNSA prepared the 2020 LANL SA to determine if the existing 2008 LANL SWEIS should be supplemented, a new EIS should be prepared, or that no further NEPA

analysis would be required. Based on the analysis presented in the 2020 SA, NNSA determined that no further NEPA analysis was needed prior to issuing this Amended ROD.

### **Changes since issuance of the 2008 LANL SWEIS RODs**

NNSA has not implemented all aspects of the 2008 LANL SWEIS Expanded Operations Alternative that were anticipated for producing more than 20 pits per year. One primary element that has changed is that a specific facility that NNSA previously analyzed, the Chemistry and Metallurgy Research Replacement Nuclear Facility (CMRR-NF), was not constructed at LANL. The CMRR-NF was a planned support facility for pit production and was not itself to be a pit production facility. Many support operations for pit production have been historically located in the Chemistry and Metallurgy Research (CMR) Facility, and CMRR-NF had been thought necessary to replace CMR. The support operations housed in CMR have been or can be relocated to other facilities at LANL, and a new CMRR-NF is no longer required to meet current mission needs. NNSA remains committed to the closure of the CMR Facility and has made upgrades to existing plutonium facilities, constructed new support facilities, and made administrative changes that have leveraged the use of existing LANL facilities.

Another change since issuance of the SWEIS RODs is that NNSA has made substantial facility upgrades to address previous technical and seismic concerns related to LANL's pit production facility, the Plutonium Facility. In the 2009 Amended ROD to the 2008 LANL SWEIS, NNSA issued a decision on certain elements of an Expanded Operations Alternative at LANL that authorized upgrades to the Plutonium Facility. Over the past ten years, NNSA has been implementing these upgrade projects. Separately, there was a three-year operational pause in LANL's Plutonium Facility but operations have resumed. The Plutonium Facility is again operational and pit production activities have resumed. The NNSA pit production mission at

LANL is operating below the level of 20 pits per year that was identified in previous NNSA decisions.

The United States has emphasized the need to eventually produce 80 pits per year and while the drivers and the requirement for pit production have remained relatively unchanged there have been specific changes in the law and national policy regarding pit production since issuance of the 2008 LANL SWEIS. Since 2014, federal law has required the nuclear security enterprise to produce not less than 30 war reserve plutonium pits during 2026. Federal law now requires that the nuclear security enterprise produce not less than 80 war reserve plutonium pits during 2030 (50 USC 2538a).

In addition, on January 27, 2017, the President directed the Department of Defense (DoD) to conduct an NPR which was issued in 2018. The 2018 NPR echoed the need for pit production and articulated a national policy that is consistent with Congressional and Presidential direction, stating that the United States will pursue initiatives to ensure the necessary capability, capacity, and responsiveness of the nuclear weapons infrastructure and the needed skill of the workforce, including providing the enduring capability and capacity to produce plutonium pits at a rate of no fewer than 80 pits per year during 2030. The 2018 NPR also details the evolving and uncertain nuclear threat environment facing the United States. Concurrent with the 2018 NPR, DOE conducted an Analysis of Alternatives (AoA) to identify and assess alternatives across DOE sites that could deliver the infrastructure to meet the sustained plutonium pit requirements of 80 pits per year. To achieve the required annual pit production rate, the AoA report considered the construction of new facilities and the refurbishment of existing facilities and identifies SRS and LANL as the two preferred alternatives to meet pit production requirements.

In 2018, Congress and the President also directed that LANL will produce a minimum of 30 pits per year for the national pit production mission and directed it be capable of surge efforts to exceed 30 pits per year to meet NPR and national policy (Pub. L. 115-232, Section 3120). To these ends, the DoD Under Secretary of Defense for Acquisition and Sustainment and the NNSA Administrator issued a Joint Statement on May 10, 2018, describing NNSA's recommended alternative to pursue a two-prong approach—50 pits per year produced at SRS and a minimum of 30 pits per year produced at LANL. In addition to improving the resiliency, flexibility, and redundancy of our Nuclear Security Enterprise by reducing reliance on a single production site, this approach enables the capability to allow for enhanced warhead safety and security to meet DoD and NNSA requirements; deliberate, methodical replacement of older existing plutonium pits with newly manufactured pits as risk mitigation against plutonium aging; and response to changes in deterrent requirements driven by renewed great power competition.

Before the recent Congressional and Presidential direction concerning specific pit production requirements at LANL, NNSA prepared the 2018 *Supplement Analysis of the 2008 Site-Wide Environmental Impact Statement for the Continued Operation of Los Alamos National Laboratory* (2018 LANL SWEIS SA) (DOE/EIS-0380-SA-04). The 2018 LANL SWEIS SA considered changes from 2008 through 2017 to programs, projects, and operations and it considered changes from 2018 through 2022 to new/modified plans, projects, and operations. The 2018 LANL SWEIS SA compared the projected environmental impacts of ongoing operations, new/modified projects, and site operation modifications from 2018 through 2022 to the environmental impacts that were analyzed in the 2008 LANL SWEIS. The key areas considered include: land resources; visual environment; geology and soils; water resources; air quality; noise; ecological resources; human health and worker health/safety; cultural resources;

socioeconomics; infrastructure; waste management; traffic and transportation; environmental justice; environmental remediation; facility accidents; climate trends and greenhouse gases; forest health and wildland fire preparedness; and mitigations. Based on the 2018 LANL SWEIS SA, NNSA determined ongoing operations, new/modified projects, and site operation modifications do not constitute a substantial change in the actions previously analyzed in the 2008 LANL SWEIS, and that there are no significant new circumstances or information relevant to environmental concerns, and that no further NEPA documentation was required for the continued operation of LANL.

### **NEPA Process for Amending the ROD**

NNSA prepared this Amended ROD to the 2008 LANL SWEIS pursuant to the regulations of the Council on Environmental Quality (CEQ) for implementing NEPA (40 CFR parts 1500-1508) and DOE's NEPA implementing procedures (10 CFR part 1021). This Amended ROD is based on federal law and NNSA's mission, information and analysis in the 1999 LANL SWEIS (DOE/EIS-0238) and public comments received; the 2008 LANL SWEIS (DOE/EIS-0380) and public comments received; the Complex Transformation SPEIS (DOE/EIS-0236-S4) and public comments received; the 2019 SPEIS SA (DOE/EIS-0236-SA-02) and public comments received; the 2020 LANL SA (DOE/EIS-0380-SA-06) and public comments received; other NEPA analysis and public comments as noted in the 2020 LANL SA.

The Draft 2008 LANL SWEIS included a robust public participation process. NNSA received comments from Federal agencies; state, local, and tribal governments; public and private organizations; and individuals. In addition, during the three public meetings that NNSA held, in Santa Fe, Española and Los Alamos, on the Draft 2008 LANL SWEIS, more than 100 speakers made oral comments and nearly 2100 public comment documents were received. NNSA



reviewed and considered all comments received on the Draft 2008 LANL SWEIS, including those received after the comment period ended, before finalizing the 2008 LANL SWEIS and issuing associated RODs.

On June 28, 2019, NNSA provided a *Notice of Availability of the Draft Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement* (Draft Complex Transformation SPEIS SA) (84 FR 31055) and invited public comment. NNSA prepared the Final Complex Transformation SPEIS SA to determine whether, prior to implementing a Modified DCE Alternative for plutonium operations to enable producing plutonium pits at a rate of no fewer than 80 pits per year by 2030, the existing Complex Transformation SPEIS should be supplemented, a new environmental impact statement be prepared, or that no further NEPA analysis was required. On January 9, 2020, after considering all comments and modifying the draft Complex Transformation SPEIS SA as appropriate, NNSA provided a *Notice of Availability of the Final Complex Transformation Supplemental Programmatic Environmental Impact Statement* (Final Complex Transformation SPEIS SA) (DOE/EIS-0236-SA-02) (85 FR 887). The Final Complex Transformation SPEIS SA included NNSA's determination that no further NEPA documentation at a programmatic level was required, but affirmed NNSA's decision to prepare site-specific documentation for the proposal to authorize expanding pit production beyond 20 pits per year at LANL. Concurrent with this Amended ROD, NNSA is issuing an Amended ROD to the Complex Transformation SPEIS, announcing the programmatic decision to implement elements of a Modified DCE Alternative that authorizes LANL to produce not fewer than 30 war reserve pits per year during 2026 for the national pit production mission and implement surge efforts to exceed 30 pits per year as needed.

At the site-specific level, NNSA prepared the 2020 LANL SA (DOE/EIS-0380-SA-06) to re-evaluate site-specific environmental impacts. In March 2020, NNSA posted the *Draft Supplement Analysis of the 2008 Site-Wide Environmental Impact Statement for Continued Operations of Los Alamos National Laboratory* to the online NNSA NEPA Reading Room and noticed interested parties via GovDelivery, inviting public comment for a 45-day period which was extended for an additional 15 days. Although pertinent regulations do not require public review and comment on an SA, NNSA decided to invite public comment in the SA to ensure fully informed decision-making. NNSA received approximately 140 comment documents on the Draft 2020 LANL SA. Many comments received on the Draft 2020 LANL SA were similar in nature to the comments NNSA received on the Draft 2019 Complex Transformation SPEIS SA. In addition to Draft 2020 LANL SA comments, NNSA reviewed all comment documents received during the public scoping process for the site-specific Savannah River Site (SRS) pit production EIS for relevance to the 2020 LANL SA.

Comments received generally centered on the following topic areas: (1) validity of the Draft 2020 LANL SA determination; (2) the purpose and need for NNSA's project; (3) NEPA process / requests for an extension to the comment period; (4) the two-prong approach to pit production; (5) new information or changed circumstances related to NNSA operations and/or environmental conditions; (6) questions about the technical aspects of the impact analyses; (7) general opposition to, or support for the proposal; and (8) comments about nuclear weapon policies or new weapon designs.

After considering all comments and modifying the Draft 2020 LANL SA as appropriate, NNSA completed the *Final Supplement Analysis of the 2008 Site-Wide Environmental Impact Statement for Continued Operations of Los Alamos National Laboratory* (Final 2020 LANL SA). NNSA

prepared the Final 2020 LANL SA to determine whether, prior to implementing additional elements of the Expanded Operations Alternative for producing a minimum of 30 pits per year at LANL and implementing surge efforts to exceed 30 pits per year, the 2008 LANL SWEIS should be supplemented, a new environmental impact statement be prepared, or that no further NEPA analysis was required. The Final 2020 LANL SA included NNSA's determination that no further NEPA documentation was required before issuing an Amended ROD.

### **Summary of Impacts**

NNSA has been directed by Congress and the President to implement pit production at LANL to meet NPR and national policy, and NNSA determined in its discretion to prepare an SA of the 2008 LANL SWEIS to re-evaluate adopting the Expanded Operations Alternative as needed. The 2020 LANL SA analyzed the potential impacts of pit production beyond 20 pits per year on land use, visual resources, geology and soils, water resources, air quality, noise, ecological resources, cultural resources, infrastructure, facility accidents, intentional destructive acts, human health, socioeconomics, environmental justice, waste management, and transportation. Table 3-1 of the 2020 LANL SA presents information in a comparative fashion for resource areas considered to have minor or negligible impacts. Environmental resource areas that may have environmental impacts related to pit production beyond 20 pits per year or require additional analysis or to address public concerns were reviewed in more detail in Section 3.3 of the 2020 LANL SA and Section 4.0 analyzed the cumulative impacts.

NNSA's conclusion based on the 2020 LANL SA was that the potential environmental impacts of the proposed action would not be different, or would not be significantly different, than impacts in existing NEPA analyses. NNSA has determined that pit production at LANL as planned (previously analyzed limits), and that meets NPR and national policy, does not

constitute a substantial change from actions analyzed previously and that while there are new circumstances or information relevant to environmental concerns these new circumstances and information do not rise to a level of significance within the meaning of NEPA. As a result, NNSA has determined that preparation of a supplemental or new EIS is not warranted at this time.

### **Environmentally Preferable Alternative**

The analyses in the 2008 LANL SWEIS of the environmental impacts associated with operating LANL identified only minor differences among the three alternatives across natural and cultural resource areas. Within each of the alternatives there are actions that could result in negative impacts, as well as those that would produce positive environmental effects. Considering the many environmental facets of the alternatives analyzed in the SWEIS, and looking out over the long term, the Expanded Operations Alternative is still the environmentally preferred alternative because that is the alternative that includes projects that support environmental remediation at LANL. Facilitating the cleanup of the site with new or expanded waste management facilities, and replacing older laboratory and production facilities with new buildings that incorporate modern safety, security, and efficiency standards, would also improve LANL's ability to protect human health and the environment while allowing LANL to continue to fulfill its national security missions. Increasing operational levels and performing various demolition activities would use additional resources and generate additional waste, but under the Expanded Operations Alternative NNSA would also undertake actions to modernize and replace older facilities with more energy efficient and environmentally-protective facilities and implement waste control and environmental practices to minimize impacts.

### **Amended Decision**

NNSA has decided to implement elements of the Expanded Operations Alternative in the 2008 LANL SWEIS, as needed, to produce a minimum of 30 war reserve pits per year during 2026 for the national pit production mission and to implement surge efforts to exceed 30 pits per year up to the analyzed limit to meet NPR and national policy. NNSA will implement the following actions: (1) remove legacy equipment and install new equipment; (2) hire and train approximately 400 additional staff; (3) upgrade existing support facilities and construct new support facilities; (4) repackage and dispose of mixed-oxide fuel fabrication facility fuel rods; (5) implement Replacement Office Buildings Project; (6) implement elements of the Security-Driven Traffic Modifications Project; (7) management and disposition of additional wastes generated; and (8) transport additional materials, parts, and waste.

### **Basis for Decision**

In making these decisions, NNSA considered the 2020 LANL SA, the 2008 LANL SWEIS, the 2008 Complex Transformation SPEIS, the 2019 Complex Transformation SPEIS SA, and other referenced NEPA analyses, and its statutory responsibilities to support the nuclear weapons stockpile. Federal law and national security policies continue to require NNSA to maintain a safe, secure, and reliable nuclear weapons stockpile and to create a responsive nuclear weapons infrastructure that are cost-effective and have adequate capacity to meet reasonably foreseeable national security requirements. This Amended ROD will enable NNSA to continue meeting federal law and national security requirements.

### **Mitigation Measures**

As described in the 2008 LANL SWEIS (DOE/EIS-0380) and the 2008 LANL SWEIS ROD (74 FR 55833), LANL operates in compliance with environmental laws, regulations, and policies within a framework of contractual requirements; many of these requirements mandate actions to

control and mitigate potential adverse environmental effects. Examples of mitigation measures include site security and threat protection plans, emergency plans, land use plans, Integrated Safety Management Systems, an Environmental Management System, pollution prevention and waste minimization programs, cultural resource and protected species management plans, and energy and water conservation programs. NNSA will continue to implement the mitigation measures identified in the 2008 LANL SWEIS ROD.

### **Signing Authority**

This document of the Department of Energy was signed on August 24, 2020, by Lisa E. Gordon-Hagerty, Under Secretary for Nuclear Security and Administrator, NNSA, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, D.C. on August 28, 2020.

**Treena V. Garrett,**  
*Federal Register Liaison Officer,*  
*U.S. Department of Energy.*